LINDBERG, G.U.; SHCHEDRINA, Z.G.; DOGEL', V.A.; RESHETNYAK, V.V.; STRELKOV, A.A.; KOLTUN, V.M.; NAUMOV, D.V.; IVANOV, A.V.; BYKHOVSKIY, B.Ye. ZHUKOV, Ye.V.; PERGAMENT, T.S.; KOROTKEVICH, V.S.; USHAKOV, P.V.; KLYUGE, G.A.; ANDROSOVA, Ye.I.; GOSTILOVSKAYA, M.G.; BRODSKIY, K.A.; GUSEV, A.V.; TARASOV, N.I.; GUR'YANOVA, Ye.F.; VAGIN, V.L.; LOMAKINA, N.B.; BULYCHEVA, A.I.; KOBYAKOVA, Z.I.; LOZINO-LOZINSKIY, L.K.; YAKOVLEVA, A.M.; GALKIN, Yu.I.; SKARLATO, O.A.; AKIMUSHKIN, I.I.; D'YAKONOV, A.M.; BARANOVA, Z.I.; SAVEL'YEVA, T.S.; SKALKIN, V.A.

List of the fauna of marine waters of southern Sakhalin and southern Kuriles. Issl.dal'nevost.mor.SSSR no.6:173-256 '59. (MIRA 13:3)

1. Zoologicheskiy institut AN SSSR.
(Sakhalin--Marine fauna)
(Kurile Islands--Marine fauna)

8849

S/133/60/000/012/011/015
A054/A027

18.1110

AUTHORS: Demakova, A.V., Tarasova, L.P., and Baranova, Z.I.

TITLE: Influence of Arsenic on the Structure and Properties of Rolled Heavy Sections Made of Ст. 3сп (St. 3 sp) Structural Carbon Steel

PERIODICAL: Stal', 1960, No. 12, pp. 1127-1130

TEXT: There are no fast rules for the permissible arsenic content of steel and the applicability of arsenic containing steels. As the Kerchensk Metallurgical Plant and "Azovstal'" receive iron ores from the Kerchensk deposit, it was found necessary to extend the investigations into this field, mainly to test the possibilities of using high-arsenic-content metal for rolling heavy sections (No. 30 channel bars). Five test meltings were carried out with St. 3 sp steel in a 350 ton furnace, two of them having the maximum As-content tolerated by the plant (up to 0.15%) and C-contents between 0.15-0.21%, three meltings were given a higher As-content (0.17 and 0.26%) and their C-contents varied from 0.17 to 0.19% (see Table 1). In these three meltings the As-content was increased by introducing into the furnace after charging a box with 33% As-content ferro-arsenicum. The metal was deoxidized in the furnace with ferromanganese; after 40 minutes about 50-60% of the melt with an As-content of 0.17% was poured. 320 kg ferro-arsenicum were then added again

Card 1/7

88499
S/133/60/000/012/011/015
A054/A027

Influence of Arsenic on the Structure and Properties of Rolled Heavy Sections Made of Ст. 3сп (St. 3 sp) Structural Carbon Steel

in the charge and after 5-8 minutes steel with an As-content of 0.26% was poured in another ladle. During pouring the metal was further deoxidized by ferrosilicium and aluminum. Blooms were rolled, then channel bars (No. 30, with a bar thickness of 11.5 mm) in such a way that the bars were made from all parts (top, middle, bottom) of the blooms. The samples were tested for chemical homogeneity, macro and microstructure, mechanical properties and impurities. As regards chemical composition, it was found that along the section in the upper part and, to a lesser extent, in the middle, there was more C and As (0.01-0.03%), Ph and S (0.002-0.006%) as compared with the bottom part. Examination of the macrostructure investigated on templates and mechanical properties showed an As-content as high as 0.26% had no adverse effect on the metal. On the contrary, the strength of high As-steel was slightly greater than of those with a 0.17% As-content. Tenacity was examined in the temperature range between + 20 and - 60°C and the tests proved that this property had not been changed noticeably by the higher As-content; while higher tenacity could be observed in samples made from the bottom part of the rolled section compared with samples made from the upper portion. The micro-

Card 2/7

S/133/60/000/012/011/015
A054/A027

Influence of Arsenic on the Structure and Properties of Rolled Heavy Sections Made of Ст. 3сп (St. 3 sp) Structural Carbon Steel

structure of the channel bar displayed a ferrite-perlite character with more ferrite. On every tested channel bar ferrite streaks could be observed after pickling with a 4% alcohol solution of HNO_3 (Fig.3). These streaks are caused by the irregular distribution of arsenicum (investigated with the Oberhoffer-reagent). Streak formation was more intense in the head of the channel bar than in the bottom part. The aggregation of arsenicum in some parts of the structure can be clearly indicated by a 10% alcoholic solution of iodine during pickling; the light streaks become darker under the effect of the iodine reagent indicating a higher As-content in these parts. The investigated channel bars from St. 3 sp steel, having an As-content between 0.14 and 0.26% satisfied the requirements of ГОСТ (GOST) 380-57; they display even better qualities than required by this standard. In the tests N.K. Ipatov, S.L. Mil'ner, P.D. Baranets, and L. Agamaleva and L. Matveyeva, Undergraduate (Degree) Students took part. There are 5 figures and 3 tables.

ASSOCIATION: Zhdanovskiy metallurgicheskiy institut (Zhdanovsk Metallurgical Institute) Zavod "Azovstal'" (Azovstal' Plant).

Card 3/7

88499

S/133/60/000/012/011/015
A054/A027

Influence of Arsenic on the Structure and Properties of Rolled Heavy Sections Made of Ст. 3сп (St. 3 sp) Structural Carbon Steel

Table 1: Composition of melts

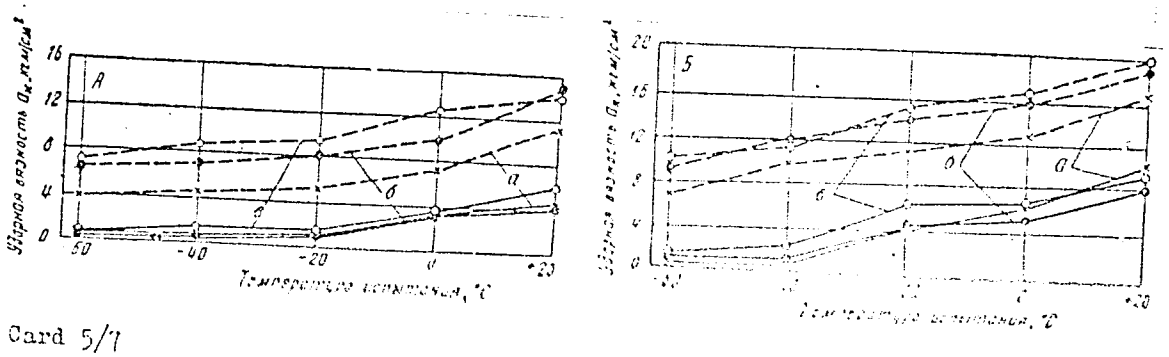
	C+1/4 Mp	C	Mn	Si	S	P	As
5419	0,370	0,21	0,55	0,22	0,045	0,020	0,141
05295	0,250	0,15	0,40	0,16	0,044	0,027	0,142
3447	0,330	0,17	0,63	0,19	0,043	0,022	0,177
9455	0,325	0,19	0,54	0,20	0,043	0,030	0,170
2-9455	0,330	0,19	0,56	0,18	0,045	0,028	0,260

Card 4/7

S/133/60/000/012/011/015
A054/A027

Influence of Arsenic on the Structure and Properties of Rolled Heavy Sections Made of Ст. 3сп(St. 3 sp) Structural Carbon Steel

Fig. 2: Tenacity in function of As-content, before (dotted curves) and after (continuous curves) ageing of St.3sp steel
A-head of rolled good; B-bottom (a-0.14% As, melt No. 5419; b-0.17% As, melt No. 9455; c-0.26% As, melt No. 2-9455)

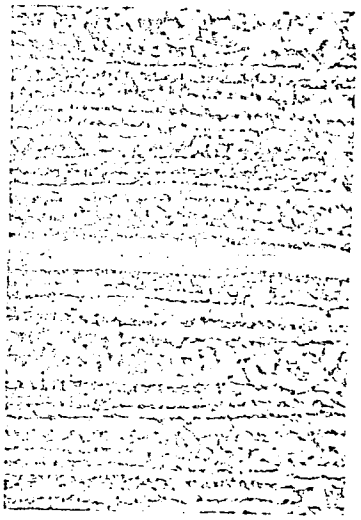


Card 5/7

S/133/60/000/012/011/015
A054/A027

Influence of Arsenic on the Structure and Properties of Rolled Heavy Sections Made of Ст. 3сп (St. 3 sp) Structural Carbon Steel

Fig. 3: Wide bright ferrite streak in the zone of intensive stratification

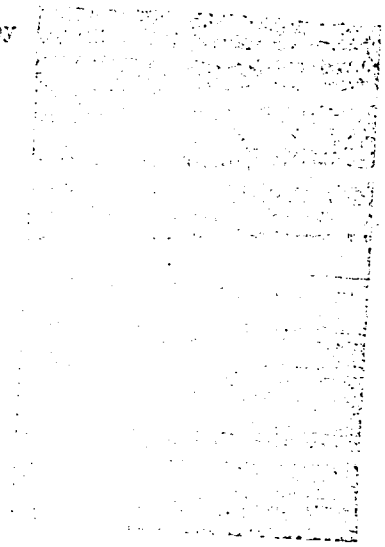


Card 6/7

S/133/60/000/012/011/015
A054/A027

Influence of Arsenic on the Structure and Properties of Rolled Heavy Sections Made of Ст. 3сп (St. 3sp) Structural Carbon Steel

Figure 4: Microstructure of steel after pickling by Oberhoffer-reagent.



Card 7/7

L 04781-67 EWP(e)/EWT(m)/EWP(t)/ETI IJP(c) JD
ACC NR: AP6023444 (N) SOURCE CODE: UR/0369/66/002/003/0295/0299

AUTHOR: Kaydash, N. G.; Nelyub, M. G.; Baranova, Z. I.; Pokhmurskiy, V. I. 51 B

ORG: Uman' Pedagogical Institute (Umanskiy pedagogicheskiy institut); Physico-Mechanical Institute, AN UkrSSR, L'vov (Fiziko-mekhanicheskiy institut AN UkrSSR)

TITLE: Effect of boronizing, borosiliconizing, calorizing and borocalorizing on the corrosion resistance of steel

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 2, no. 3, 1966, 295-299

TOPIC TAGS: boron, silicon, photocolorimeter, metal coating, corrosion resistance, fatigue strength / / FEK-M photocolorimeter, steel 45, steel 20

ABSTRACT: The effect of each of these types of the surface impregnation of steel was investigated with respect to such properties of steel 45 as corrosion resistance, fatigue strength and corrosion-fatigue strength. Boronizing was accomplished in a mixture of boron carbide and borax and of crystalline silicon with ammonium chloride; calorizing, in a mixture of ferroaluminum and ammonium chloride; and boronizing-calorizing and calorizing-boronizing, in boronizing and calorizing mixtures (G. V. Zemskov, N. G. Kaydash, MITOM,

Card 1/2

1964, no. 3; 1965, no. 5). The steel specimens thus treated were tested for corrosion in freshly prepared 10% aqueous solutions of table salt, NaOH, HCl, H_2SO_4, HNO_3 and phosphoric acid, with subsequent analysis of the spent solutions for Fe and diffusing elements (B, Al, Si) and visual observation of corrosion damage to the specimens (cracks, pits and peeling of the diffusion layer from the base metal). Quantitative analysis was performed with the aid of a FEK-M photocolorimeter. Findings: diffusion boronizing, borosiliconizing, calorizing and borocalorizing all enhance the corrosion resistance of 45 steel in 10% aqueous solutions of the aforementioned aggressive media. In the NaCl solution the corrosion resistance of steel is best enhanced by calorizing, calorizing-boronizing and boronizing; in the NaOH solution, by calorizing, boronizing, borosiliconizing, and boronizing-calorizing; in the HCl solution, by borosiloconizing, boronizing, and calorizing-boronizing. Considering that many work parts perform under loads while being exposed to aggressive media, the effect of these types of surface treatment on the fatigue and corrosion-fatigue strength of steel 20 was also investigated and it was found that boronizing and borosiliconizing enhance the fatigue limit of the steel in corrosive media by as much as 35 and 80%, respectively. Boronized specimens display a higher corrosion resistance and lower corrosion-fatigue strength than borosiliconized specimens. This indicates that for diffusion coatings -- at least for those of the boride type -- there does not exist a correlation between the corrosion resistance of metals in nonstressed state and their corrosion-fatigue strength. Orig. art. has: 1 figure, 2 tables.

SUB CODE: 13, 11, 20/ SUBM DATE: 26Jan66/ ORIG REF: 009

BARANOVA, Z.K.; VOLOSOVA, R.I.; VORONKEVICH, S.D.; IL'INSKAYA, S.D.; SERGEYEV, Ye.M.

Change in Permian clays in the weathering crust from the point of view of engineering geology. Sov. geol. 2 no.6:114-121 Je '59. (MIRA 12:12)

1.Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Clay)

AUTHOR: Baranova, Z.N. and Velizhanina, K.A. 46-2-1/23

TITLE: Acoustical properties of certain sound-absorbing materials. (Akusticheskiye parametry nekotorykh zvukopogloshchayushchikh materialov)

PERIODICAL: "Akusticheskiy Zhurnal" (Journal of Acoustics), 1957, Vol, 3, No.2, pp. 99-103 (U.S.S.R.)

ABSTRACT: The sound energy losses in sound-absorbing materials are due to viscous drag, thermal conductivity and to the non-ideal rigidity of the material body, the latter producing losses of relaxation character. While the Kirchhoff-Helmholz theory may be applied (2) in the case of a porous material with ideally cylindrical pores of equal diameter and with a perfect body rigidity; in the case of non-homogeneous material the theoretical evaluation of losses becomes practically impossible and the authors consider that experimental evaluation of acoustical properties of certain materials is necessary. They have experimentally measured the properties of cotton wool (0.014 g/cm^3 and 0.044 g/cm^3 density), of starch-bonded fibreglass, glass wool, (fibre diameter d = 20 μ, density 0.14 g/cm^3) and "mypor" ("solid foam" consisting of 72.2% formaldehyde, 27.3% urea and 0.5% sodium acetate), using the method suggested by Zwicker and Costain (1): the impedance of a layer of the thickness l on a

Card 1/4

Acoustical properties of certain sound-absorbing materials (Cont.)

on a non-resilient base is:

$$z_r = W \coth \gamma l \qquad (1)$$

and that of a layer with a $\lambda/4$ thick air gap behind it (where λ is the wavelength) is:

$$z_a = W \tanh \gamma l \qquad (2)$$

hence:

$$\tanh \gamma l = \sqrt{\frac{z_a}{z_r}} \qquad (3)$$

where γ is the propagation constant. From the above formulae, the volumetric elasticity modulus is found to be:

$$K = j\omega \frac{W}{\gamma} \qquad (4)$$

Card 2/4

and the acoustical density:

Acoustical properties of certain sound-absorbing materials. (Cont)

$$\rho = \frac{W\gamma}{j\omega} \qquad (5)$$

The Z_1 layer impedance can be measured using the acoustical interferometer method from the position of the first standing wave minimum and from the SWR.

Since results of measurements depend on the sample thickness, the optimum thickness has been evaluated experimentally and found to be 2 to 3 cm. The following notation has been adopted: $W = W_r + jW_i$ = complex wave impedance ; $\gamma = \beta + j\alpha$ = propagation constant; $\rho = \rho' + j\rho''$ = complex acoustical density; $K = K_r + jK_i$ = complex coefficient of volumetric elasticity; c = sound velocity, as found from $c = \frac{\omega}{\alpha}$. The results have been tabulated. It has been found that for cotton-wool the wave impedance decreases with frequency while the damping coefficient and sound velocity increase. For fibreglass the real part of the wave impedance has been found to be 7 to 8 times larger than that of air (at low frequencies), for the glass wool it being only twice as large and approaching it at high frequencies.

Card 3/4

Acoustical properties of certain sound-absorbing materials. (Cont.)

Combined with the very large damping coefficient, these properties make glass wool a very good sound absorbing material.

There are 5 tables of experimental results and 7 references, 2 of which are Slavic.

ASSOCIATION: Chair of Acoustics of the Moscow State University (Kafedra Akustiki Moskovskogo Gosudarstvennogo Universiteta)

SUBMITTED: July 17, 1956.

AVAILABLE: Library of Congress

BARANOVA, Z.N.

21(4) PHASE I BOOK EXPLOITATION SOV/1441

Pavlova, S.N., Z.V. Driatskaya, Z.N. Baranova, M.A. Mkhchiyan, N.M. Zhmykhova, and S.V. Zavershinskaya.

Nefti vostochnykh rayonov SSSR; spravochnaya kniga (Oils of Eastern Regions of the USSR; a Handbook) Leningrad, Gostoptekhizdat, 1958. 506 p. 1,000 copies printed.

Sponsoring Agencies: USSR Gosudarstvennyy planovy komitet, Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.

Eds.: Pavlova, S.N.; and Z.V. Driatskaya; Executive Ed.: Ragina, G.M.; Tech. Ed.: Yashchurzhinskaya, A.B.

PURPOSE: This handbook is intended for petroleum production personnel, refiners, scientific research organizations, as well as students

Card 1/22

and faculty members at petroleum vuzes.

COVERAGE: This book consists of two parts. The first part constitutes a card index listing the characteristics of crude oil found in eastern regions of the USSR, as well as of its end products. The second part is a continuation of the handbook published in 1947 under the title Soviet Crudes. It contains more data, however, and treats a much larger number of crudes. The card index shows the properties of crudes as well as the products obtained from them by straight-run distillation. Card format as well as the method of showing the characteristics of crudes and their products was adopted by the All-Union Scientific Research Institute of Petroleum Industry, and approved by the All-Union Council for the Study of Petroleum, Its Products, and Methods Used To Analyze Them. Earlier work done by Professor A.S. Velikovskiy, Candidates of Sciences S.N. Pavlova, P.S. Gofman, and Ye. F. Rudakova had been used in this book. P.N. Yenikeyev was consulted in matters dealing with petroleum geology. There are no references given.

11.0130

26525
S/065/61/000/009/002/003
E030/E135

AUTHORS: Pavlova, S.N., Driatskaya, Z.V., Baranova, Z.N., and Zavershinskaya, S.V.

TITLE: The first exploitable Siberian crude

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1961, No.9, pp. 8-14

TEXT: An essay is given on this crude, discovered in April 1960 in Western Siberia, 400 km North of Tyumen'. The present find is called the Shaim field, and is at 1487-1500 m depth in a Jurassic bed. It has the following characteristics:

Density ρ_4^{20}	0.827
Carbon residue, %	2.08
Composition, %	
sulphur	0.46
adsorbable resins	10.2
asphaltenes	0.82
paraffins	2.89/55°
gas	3.5

Elemental crude composition, %

C	85.8
H	13.28
O	0.36
S	0.46
N	0.10

Card 1/3

26525

The first exploitable Siberian crude S/065/61/000/009/002/003
E030/E135

Gas composition, %		Yield of white products, %	
C_2H_6	1.2	up to 200°C	28.5
C_3H_8	25.8	" " 300°C	45.7
i-C_4H_{10}	17.2	" " 350°C	55.3
n-C_4H_{10}	55.8		

Properties of fractions are as follows:
SRB (28-85°C), yield 7.6%. ON 71.5 straight, 91 with 2.5 g TEL/kg, suitable for motor spirit B-91/155 (B-91/155).
SRB (28-120°C), yield 14.3%. ON 65.5 straight, 76.5 with 0.41 g TEL/kg, suitable for spirit A-76.
SRB (28-180°C), yield 25%, ON 66.6 with 0.82 g TEL/kg, suitable for motor spirit A-66. 0.05% S in all above fractions; aromatic content rises from 0 to 14%, and the naphthene content falls from 43% to 34%, of which just under one third is six-ringed. The crude therefore gives a much better platformer feed than Tuymazy. 150-280 °C cut gives colour-stable kerosine, with 22.8% yield on crude. Density is 0.811, and smoke point 21 mm, with 0.07% S. Diesel cuts, in the 150 to 350 °C range, give

Card 2/ 3

The first exploitable Siberian crude

26525
S/065/61/000/009/002/003
E030/E135

52-59 cetane number, 0.08-0.12% S, and -18 to -25 °C pour point, with 27 to 36% yield. The residue range from 350 °C to 480 °C was examined in 3 °C cuts, and found suitable for all grades of fuel oil except naval grades. Throughout the range, the oil qualities change as follows:

Density	ρ_4^{20} 0.8640-0.9126	Viscosity, cs	
		ν 50°	7.5 - 60.7
Temperature, °C	pour point, 10-40	ν 100°	2.2 - 10.1
		Sulphur content, %	0.3 - 0.84

There are 4 figures and 8 tables.

ASSOCIATION: VNII NP

Card 3/3

PAVLOVA, Serafima Nikolayevna; DRIATSKAYA, Zoya Vasil'yevna; MKHCHIYAN, Mariya Artemovna; BARANOVA, Zoya Nikolayevna; ZHMYKHOVA, Nataliya Mikhaylovna; ZAVERSHINSKAYA, Sof'ya Viktorovna; KLEYMENOVA, K.F., ved. red.; POLOSINA, A.S., tekhn. red.

[Petroleum in eastern regions of the USSR]Nefti vostochnykh raionov SSSR; spravochnaia kniga. Pod red. S.N.Pavlovoi i Z.V. Driatskoi. Moskva, Gostoptekhizdat, 1962. 607 p. (MIRA 15:12)
(Petroleum--Analysis)

S/065/62/000/011/002/006
E075/E436

AUTHORS: Pavlova, S.N., Baranova, Z.N.

TITLE: Crudes from new deposits in the Permskaya oblast' District

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.11, 1962, 32-36

TEXT: The production of crude oil in the Permskaya oblast' district should increase by more than three times due to exploitation of several deposits. The crudes from the Ufa swell are the most suitable for refining. They contain from 0.54 to 0.87% S, 5.2 to 9.9% asphalts and resins, 5.5 to 6.1% wax and 45.2 to 50.8% of fractions boiling to 300°C. In the Lobanovo crudes the S content is 1.4%, wax 5.4 to 6.7%, asphalts and resins 3.25 to 9.74%, fractions boiling to 300°C 39.2 to 41%. Chernusheno crudes have 2.2 to 2.95% S, wax 2.04 to 4.58%, asphalts and resins 12.7 to 24.1%, fractions boiling to 300°C 32.2 to 37.7%. Crudes from the region between the Kuyeda and Andreyevka swells contain 2.00 to 3.24% S, 2.22 to 3.36% wax, 22.8 to 32.5% asphalts and resins and 23.5 to 30% of fractions boiling to 300°C. Benzene distillates of all the crudes have octane numbers not exceeding 45, paraffinic

Card 1/2

Crudes from new deposits ...

hydrocarbons being predominant (Cp varies from 59 to 75%). Kerosene fractions also have low octane numbers (below 24). Diesel fuels from all the crudes have high cetane numbers (45 to 62) and pour points. Base oils (distillates) that can be obtained from the crudes have the viscosity at 50°C of 9.2 to 44 cS and bright stocks - 20 to 28 cS at 100°C. Viscosity index of all the oils varies from 83 to 89. Fuel oils (except marine oils) are obtainable from all the crudes and contain 1.2 to 2.5% S. There are 7 tables.

ASSOCIATION: VNII NP

PAVLOVA, S.N.; BARANOVA, Z.N.

Crudes of the new oil fields of the Perm Province. Khim.i tekh.topl. i masel 7 no.11:32-36 N '62. (MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva.
(Perm Province—Petroleum—Analysis)

MKHCHIYAN, M.A., BARANOVA, Z.N.; DRIATSKAYA, Z.V.; PAVLOVA, S.N.

Petroleums of Siberia. Khim. i tekh. topl. i masel 9 no.12: 1-6 D '64. (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.

BARANOVA, Z. P.

"Regeneration of Hemoglobin in Chemical Homolysis," Biokhimiya, 13, No.2, 1948

Physico-Chemical Lab., Central Inst. Hematology and Blood Transfusion, AMS USSR

GEL'PERIN, N.I.; PEBALK, V.L.; BARANOVA, Z.P.

Study of mass transfer in rotating disk extractors. Khim. i tekh. topl. i masel 8 no.6:46-52 Je '63. (MIRA 16:6)

1. Institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova.
(Extraction apparatus)
(Mass transfer)

GEL'PERIN, N. I.; IVBALK, V. L.; YURCHENKO, L. D.; ASSMUS, M. G.; BARANOVA, Z. P.; SHASHKOVA, M. N.; CHICHERINA, T. G.; ZAMYSHLYAYEV, V. G.; CHECHOMOV, Yu. K.; KUZNETSOVA, M. I.

"Investigations in the field of the technique of liquid extraction."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

Moscow Inst of Light Chemical Technology.

TARASOV, S.V.; CHEKUNIN, K.I., inzh., retsenzent; BARANOVA, Z.S., inzh., red.; UVAROVA, A.F., tekhn. red.

[Technological processes in the manufacture of watches] Tekhnologiia chasovogo proizvodstva. Izd.2., perer. i dop. Moskva, Mashgiz, 1963. 535 p. (MIRA 16:7)
(Clockmaking and watchmaking--Machinery)

STARIKOVA, M.V.; PETROV, B.N., akademik, red.; BARANOVA, Z.S., inzh., red.; EL'KIND, V.D., tekhn. red.

[Self-oscillations and slippage conditions in automatic regulation and control systems]Avtokolebaniia i skol'ziashchii rezhim v sistemakh avtomaticheskogo regulirovaniia i upravleniia. Pod red. B.N.Petrova. Moskva, Mashigz, 1962. 194 p. (MIRA 15:9)

(Automatic control)

SHPOLYANSKIY, V.A.; CHERNYAGIN, B.M.; IVOBOTENKO, B.A., kand. tekhn. nauk, retsenzent; KARANOVA, Z.S., inzh., red.

[Electrical timing devices] Elektricheskie pribory vremeni. Moskva, Mashinostroenie, 1964. 387 p.
(MIRA 17:11)

AYNBERG, V.D.; SABSOVICH, L.L.; LIVSHIN, G.L., retsenzent;
BARANOVA, Z.S., inzh., red.

[Collection of problems and exercises with answers on programming the "Ural-1" digital computer] Sbornik zadach i uprazhnenii po programmirovanii dlia ETsVM "Ural-1" s resheniiami. Moskva, Mashinostroenie, 1964. 350 p.
(MIRA 17:11)

CHINAYEV, P.I.; ZAYTSEV, G.F., kand. tekhn. nauk, retsenzent; SUD-ZLOCHEVSKIY, A.I., red.; BARANOVA, Z.S., red. izd-va; UVAROVA, A.F., tekhn. red.; MAKAROVA, L.A., tekhn. red.

[Self-adoptive systems; their calculation and design] Samonastraivaiushcheisia sistemy; raschet i proektirovanie. Moskva, Mashgiz, 1963. 302 p. (MIRA 17:1)

YEGOROV, V.A.; D'YACHENKO, P.Ye., doktor tekhn. nauk, retsenzent;
BARANOVA, Z.S., inzh., red.

[Optical instruments and feeler gauges for measuring the roughness of surfaces] Opticheskie i shchupovye pribory dlia izmereniia shorokhovatosti poverkhnosti. Izd.2., ispr. i dop. Moskva, Mashinostroenie, 1965. 222 p.
(MIRA 18:3)

PUFKOV, K.A.; POPOV, Ye.P., doktor tekhn. nauk, prof., retsenzent; BARANOVA, Z.S., inzh., red.

[Statistical calculation of nonlinear systems of automatic control] Statisticheskii raschet nelineinykh sistem avtomaticheskogo upravleniia. Moskva, Mashinostroenie, 1965 p. (MIRA 18:4)

BARANOVA, Z.Ye.

Stratigraphy, lithological-facial characteristics and oil-bearing prospects of Jurassic sediments in western Turkmenia. Avtoref. nauch. trud. VNIGRI no.17:259-267 '56. (MIRA 11:6)
(Turkmenistan--Petroleum geology)

BARANOVA, Zinaida Yefimovna; KULIKOV, M.V., nauchnyy red.; YASHCHURZHINSKAYA, A.B., tekhn.red.

[Problems of oil and gas potentials of Central Asia] Problema neftegazonosnosti Srednei Azii. Leningrad, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry. Leningr. otd-nie. No.3. [Lithology and formation of Jurassic sediments in the Greater Balkhan Range] Litologiia i usloviia obrazovaniia iurskikh otlozhenii Bol'shogo Balkhana. 1961. 127 p. (Leningrad. Vsesoiuznyi geologicheskii institut. Trudy, vol.43) (MIRA 14:7)
(Balkhan range--Sediments (Geology))

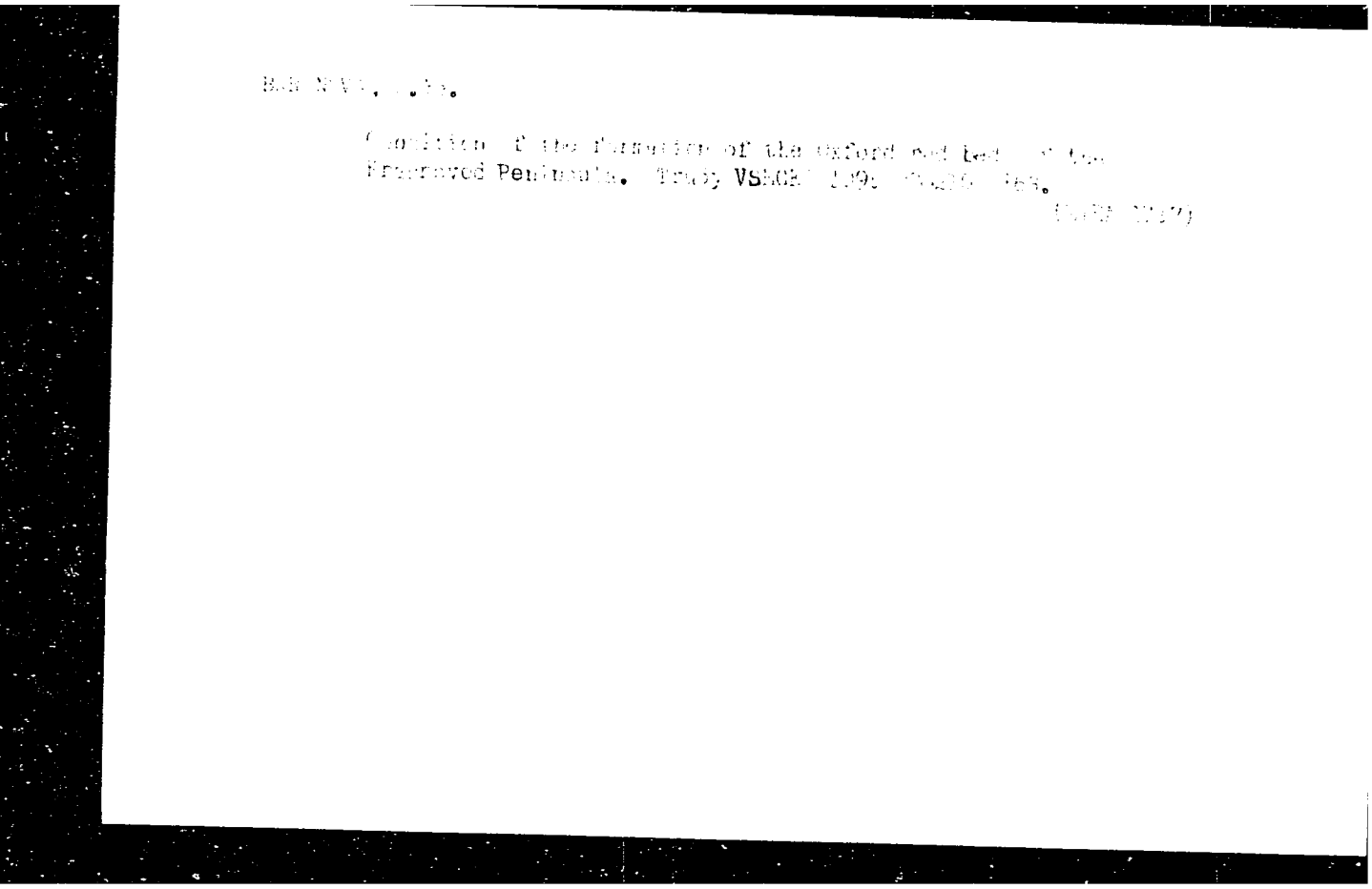
BARANOVA, Z.Ye.

Lithology and conditions of formation of rocks of the Bajocian stage in the Greater Balkhan Range. Trudy VSEGEI 42:104-119 '60. (MIRA 14:9)

(Balkan Range--Rocks, Sedimentary) (Organic matter)

BARANOVA, Z.Ye.

New data on the stratigraphy of Jurassic sediments in the Kuba-Dag. Inform.sbor.VSEGEI no.46:37-49 '61. (MIRA 15:3)
(Kuba-Dag--Geology, Stratigraphic)



BARANOVA, Z.Ye.; BURAKOVA, A.T.; BEKASOVA, N.B.; CHIKHACHEVA, P.K., red.; DEMENT'YEVA, T.A., vedushchiy red.; POLOSINA, A.S., tekhn.red.

[Stratigraphy, lithology, and flora of Jurassic sediments of the Tuarkyr region.] Stratigrafiia, litologiia i flora iurskikh otlozhenii Tuarkyra. Moskva, Gostoptekhizdat, 1963. 231 p. plates. (Leningrad. Vsesoiuznyi geologicheskii institut. Trudy, vol. 88. Problema neftegazonosnosti Srednei Azii, no.13). (MIRA 16:11)

BARANOVIC, B., ing.

Parts of the installations of the Zagreb thermoelectric power plant will be put in operation in December 1961. Energija Hrv 10 no. 9/10:329-330 '61.

BARANOVIC, Borivoj, inz.

The Thermoelectric-Power Plant Zagreb II is put on trial.
Energija Hrv 11 no.3/4:99-101 '62.

BARANOVIC, B.

BARANOVIC, B. Design of transmission lines in Croatia. p. 199

Vol. 9, no. 4/5, Apr./May 1956
ELEKTROPRIVERDA
TECHNOLOGY
Beograd

So: East European Accession, Vol. 6, no.3, March, 1957

BARANOVIC, Borivoj, inz. (Zagreb)

The Zagreb Thermoelectric-Power and Heating Plant. Energija Hrv 11 no.7/8:191-217 '62.

1. Termoelektrana-Toplana Zagreb, Zagreb, Gunduliceva 32.

BARANOVICH, M.K., dotsent; SIGIDIN, Ya.A.; LYSOCHENKO, V.A.

Hemorrhagic thrombocytemia as a manifestation of hyposplenism. Probl.gemat. i perel.krovi 4 no.3:32-36 Mr '59. (MIRA 12:6)

1. Iz kafedry fakul'tetskoy terapii (zav. - deystvitel'nyy chlen AMN SSSR prof.A.I.Nesterov) II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.

(SPLEEN, dis.
hyposplenism, manifest., hemorrh. thrombopenia (Rus))
(PURPURA, THROMBOPENIC, etiol. & pathogen.
hyposplenism (Rus))

BARANOVICH, M.K., dots.; SIGIDIN, Ya.A.

Hypertensive crises of the lesser circulation. Sovet. med. 23 no.2: 28-34 F '59. (MIRA 12:3)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir. - deystvitel'nyy chlen AMN SSSR prof. A.I. Nesterov) lechebnogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.
(HYPERTENSION
pulm., etiol. & ther. (Rus))

BARANOVICH, M.K.

"Practical analysis of electrocardiograms" by A.V.Sumarokov and A.A.Mikhailov. Reviewed by M.K.Baranovich. Sov.med. 26 no.10: 153-154 '62.
(ELECTROCARDIOGRAPHY) (SUMAROKOV, A.V.) (MIKHAILOV, A.A.)

BARANOVICH, T.M. (Moskva)

Equivalence of topological spaces in primitive classes of algebras.
Mat. sbor. 56 no.1:129-136 Ja '62. (MIRA 15:1)
(Algebrain topology)

BARROVICH, T.K.

Polyequilibrium in universal algebras. Sib. mat. zhur. 5 no.4:
976-986 '64. (MIRA 17:11)

BARANOVICH, T.M. (Moskva)

Free resolutions and intersections of primitive classes of algebras. Mat. Sbor. 67 no.1:135-153 My '65.
(MIRA 18:5)

BARANOVICH, V.A.

New foreign books on caoutchouk and rubber. Kauch. i rez. 22 no.9:64 S '63. (MIRA 16:11)

BARANOVICH, V.

New publications of the foreign scientific and technical literature. Kauch. i rez. 22 no.11:59-60 N '63. (MIRA 17:2)

BARANOVICH, V.A.

New books on caoutchouc and rubber published in foreign countries.
Kauch. i rez. 22 no.10:61-62 O '63. (MIRA 16:11)

BARANOVICH, V.

First issue of the Information Bulletin of the Polish Institute of the Rubber Industry for 1963. Kauch. i rez. 22 no.7:63 Jl '63. (MIRA 16:8)

(Poland--Rubber industry--Periodicals)

BARANOVICH, V.

New book on the design of gas masks. Kauch. i rez. 22 no.7: 62-63 Jl '63. (MIRA 16:8)

(Gas masks)

BARANOVICH, V.A.

Organization of an exemplary scientific and technical information service is an urgent objective service is an urgent objective. Kauch.i rez. 21 no.9:58-60 S '62. (MIRA 15:11)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti. (Rubber industry—Information services)

BARANOVICH, V.A.

New books on caoutchouk and rubber published in foreign countries. Kauch. i rez. 22 no.5:62-63 My '63. (MIRA 16:7)
(Bibliography--Rubber)

BARANOVICH, V.A.

New foreign publications on adhesives and adhesion. Kauch. i rez. 22 no.6:62 Je '63. (MIRA 16:7)

(Bibliography---Adhesives)

BARANOVICH, V.A.

Latest Soviet and foreign literature on polymeric materials and their uses. Kauch. i rez. 23 no.4:57-59 Ap'64 (MIRA 17:7)

SLOBODIN, Ya.M.; BARANOVICH, Z.N.; BOGDANOVA, L.P.

Determining the solubility of gases in liquids. Zav. lab. 30 no.8:972 '64. (MIRA 18:3)

1. Severo-zapadnyy zaochnyy politekhnicheskiy institut.

ZAKHAROVA, K., rabotnitsa; PEREGUDOVA, M., rabotnitsa; BARANOVSKAYA, A., rabotnitsa; KAMENSKIY, M.

Subsidiary work should be mechanized too. Rabotnitsa 36 no.5:25 My '58. (MIRA 11:5)

1.Voronezhskiy shinnyy zavod (for Zakharova, Peregudova, Baranovskaya).
2.Tekhnicheskiy inspector Voronezhskogo oblastnogo soveta profsoyuzov (for Kamenskiy).

(Tire, Rubber)
(Efficiency, Industrial)

KUL'SKIY, L.A.; KALINIYCHUK, Ye.M.; BARANOVSKAYA, A.N.

Interaction of active chlorine with ammonia and phenols in connection with drinking water purification. Ukr. khim. zhur. 29 no.10:1099-1104 '63. (MIRA 17:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

SHEVCHENKO, M.A.; KALINIYCHUK, Ye.M.; BARANOVSKAYA, A.N.

Chlorination of underground water containing phenols, humic substances, and petroleum products. Ukr. khim. zhur. 29 no.10:1105-1108 '63. (MIRA 17:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

SHEVCHENKO, M.A.; KALINIYCHUK, Ye.M.; BARANOVSKAYA, A.N.

Chlorine dioxide processing pf phenol-contaminated underground water. Ukr.khim.zhur. 29 no.12:1332-1336 '63. (MIRA 17:2)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

BARANOVSKAYA, A. V.

The role of soil-forming rocks in processes of humus accumulation. A. V. Baranovskaya. *Uchenyi Zapiski Leningrad. Gosudarst. Univ. im. A. A. Zhdanova* No. 140, *Ser. Biol. Nauk* No. 27, 137–57(1951).—B. makes a comparative study of accumulation and distribution of humus and fulvic acids in soils of the humus-podzol and gleyey-podzol (northern) subzones. B. contrasts silty clay-loams of eastern provinces (on clay shales interlayered with sandstones and limestones), with morainic sandy loams of western provinces (on gravelly or dense rock). All these soils have a horizon (A_0) of weakly mineralized litter enriched with bitumens, poorly developed humification, and they contain fulvic acids. In western sandy loams the fulvic acids (which constitute 50% of the total humus) are deeper, in a well-defined humus-illuvial horizon. Liming liberates N from these fulvic acids. Surface-gleyey, weakly podzolized, eastern soils are poor in humus and lack this humus-illuvial horizon; their exchange acidity is high. Their mobile N is much higher in surface layers. Sandy loams contain 13–20% of humus as humic acid; whereas not over 10% of total org. substance in clay loams is present as humic acid. Liming, addn. of fish residues, and addn. of clayey fractions (lake silts) is very effective on the sandy loams.

A. W. Daly

BARANOVSKAYA, A. V.

"Character of the Quantity and Composition of Organic Matter in Soils of the Kaliningrad Province," Pochvovedeniye, No.5, 1952

BARANOVSKAYA, A.V.

USSR

The activity of catalase in several soils of the forest and steppe zones. A. V. Baranovskaya (V. V. Dokuchaev Central Soil Museum, Leningrad). *Pochvovedenie* 1954, No. 11, 41–8.—A report on the catalase activity, as measured by the method of Kuprevich (preceding abstr.), on a series of profiles in the northern taiga (northern and middle Karelya), in the western sod-podzol zone (Kaliningrad province), eastern part of the southern taiga (Ussurisk region), and from the provinces of Kuibyshev, Stalingrad, and Saratov, chiefly chernozem and chestnut brown soils. J. S. Joffe

BARANOVSKAYA, A.V.

Chem

Study of organic matter in chernozems of the steppe. A. V. Baranovskaya. *Sbornik Rabot Tsentral. Muzeya Pochvoved. im V. V. Dokuchaeva* 1954, No. 1, 291–8.—The amt. and compn. of org. matter in chernozems were studied as affected by cultivation and 30 years' use of forest strips in the Voronezh district. The one-m.-thick surface layer of soil between forest strips contained 550–600, but in open steppe only 475–540 tons org. matter per ha. The 15-cm.-thick surface layer of soil contained 5–6% org. C, of which 35–45% was humic acid, 13–23% fulvic acid, 5% hydrolyzed in 1*N* H_2SO_4, and 30–35% residual humin. The content of humic acid decreased, and that of fulvic acid and humin increased, with depth in the soil. A higher content of humic acid was found in soils between forest strips than in open steppe, in samples collected in April than in July, and in forested or virgin soils than in cultivated fields, probably because of moisture conditions. The grass-arable rotation did not show any effect on amt. of humus.

Ronald G. Menzel

1

USSR/Soil Science. Physical and Chemical Properties of Soils. J-1

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24691.

Author : Baranovskaya, A.V.
Inst :
Title : On the Seasonal Variability of Some Chemical Properties in Soils of the Vologodskaya Oblast (Prelim. Report).

Orig Pub: Tr. nauchn. konferentsii po izuch. Vologodsk. obl. Vologda, 1956, 114-128.

Abstract: Results are described of fixed observations, conducted by the Central Museum of Soil Science of the AS USSR, on fir-wood soils, on meadow soils, and on some other varieties of soils under cultivation in 1953-1954.

Card : 1/1

USSR / Soil Science. General Problems. J

Abs Jour: Ref Zhur-Biol., No 21, 1958, 95668.

Abstract: zolized cultivated soils contained, in the upper 10 cm layer in 1 kg of dry soil, 48 mg of water-soluble Ca, 135 mg of humus, 23 mg of nitrates; in August, the content of Ca decreased to 17 mg, humus to 138 mg, nitrates to 2.4 mg. In the composition of water tested by a lysimeter, the same substances were found that were also in the water extracts. Fluctuation of humus reserves in the 20-cm. layer in the soils runs from 4 to 12.5 t/ha. In the dynamics of the microbiological processes, there was observed a spring maximum in the development of the microorganisms, a depression during the summer period and an increase in the quantity of microflora in the autumn, which corresponds to the occurrence of changes of the humus reserves in the soil. The Catalase activity indirectly

Card 2/3

Abs Jour: Ref Zhur-Biol., No 6, 1598, 24720.

Author : Baranovskaya, A.V.
Inst :

Title : The Problem of the Influence of Irrigation on the Composition and Reserves of Humus in Soils.

Orig Pub: S. rabot Tsentr. muzeye pochvoved. AN SSSR, 1957, vyp 2, 271-280.

Abstract: The reserves of humus in the dark-chestnut irrigated soils of the Saratov oblast, in a 100-cm layer, constitute 270, in virgin soils - 240 thousand/ha. The composition of the humus in the irrigated soils, in comparison with the virgin soils, changes toward an increase of the content of humic acid and a decrease of the quantity of non-hydro-

USSR/Soil Science - Physical and Chemical Properties of Soils. J

Abs Jour : Ref Zhur Biol., No 22, 1958, 100018

Author : Baranovskaya, A.V., Daragan-Sushchova, A.Yu., Globus, N.M.

Inst : -

Title : Seasonal Modifications of the Chemical Properties of Certain Soils of the Vologodskaya Oblast'.

Orig Pub : Pochvovedeniye, 1957, No 7, 73-79

Abstract : Observations were conducted on sod - deeply-podzolic and sod-alluvial non-podzolic soils of a slightly loamy mechanical composition under the forest, under the meadow and under various agricultural cultivations. In lysometric waters at a depth of 20 cm, there was noted an increase of the soluble humus from 5.7-14.3 mg/l in May to 21.2-34.4 mg/l in June and of nitrates from 4.8-9.7 mg/l in May to 26.9-33.2 mg/l in July. The maximum content of water-soluble humus, calcium and nitrates were

Card 1/2

BARANOVSKAYA, A.V.; PEREVOZCHIKOVA, Ye.M.

Brief characteristics of soil formation conditions and natural zones of southern Karelia. Trudy Kar. fil. AN SSSR no.9:4-26 Trudy Kar. fil. AN SSSR no.9:4-26 '57. (MIRA 12:1)
(Karelia--Soil formation)

BARANOVSKAYA, A.V.; GRABOVSKAYA, O.A.

Seventy-fifth birthday of Zinaida IUlievna Shokal'skaia.
Izv.Vses.geog.ob-va 89 no.4:365-367 Jl-Ag '57. (MIRA 10:10)
(Shokal'skaia, Zinaida Iulievna, 1882-)

BARANOVSKAYA, A.V.

Seasonal changes in the chemical properties of soils in the forest zone. Sbor. rab. TSentr. muz. pochv. no.3:203-255 '60.
(MIRA 13:9)

(Forest soils) (Soil chemistry)

BARANOVSKAYA, A.V.

Annual changes in the humus composition of turf-Podzolic sandy-Loam soils. Pochvovedenie no. 2:79-85 F '61. (MIRA 14:2)

1. TSentral'nyy muzey pochvovedeniya AN SSSR.
(Humus)

BELOV, N.P.; LEVINA, V.I.; ZHUKOVA, R.A.; ROYZIN, M.B.; PEREVERZEV, V.N.; MANAKOV, K.N.; BARANOVSKAYA, A.V., kand. geol.-miner., red.; ZAMOTKIN, N.Ya., red.; CHEREVATYY, P.P., tekhn. red.

[Soils of Murmansk Province and the improvement of their fertility] Pochvy Murmanskoi oblasti i povyshenie ikh plodorodiia. [By] N.P.Belov i dr. Kirovsk, Izd-vo "Kirovskii rabochii," 1963. 117 p. (MIRA 17:3)

BARANOVSKAYA, A.V.

Soil cover of the Otradnoye experimental station. Trudy Bot. inst. Ser. 3 no.14:12-24 '63. (MIRA 16:9)
(Otradnoye region (Leningrad Province)--Soils--Composition)

BARANOVSKAYA, A.V.

Dynamics of the characteristics of soils under meadow grass stands. Trudy Bot. inst. Ser. 3 no.14:118-139 '63. (MIRA 16:9)
(Otradnoye region (Leningrad Province)--Grasses)
(Crops and soils)

BARANOVSKAYA, D. S.

Baranovskaya, D. S. "On the problems of large-scale medical exploration as a method of combating gynecological diseases", Sbornik nauch. trudov (Rost. obl. nauch.-issled. akushersko-ginekol. in-t), Issue 8, 1948, p. 1 1-104.

So: U-3201, 10 April 1953 (Letopis 'Zhurnal 'nykh Statey, No. 12, 1949).

BARANOVSKAYA, F. S. DECEASED

Medicine see IIC

BODNYA, M.D.; KIREYEVA, V.V.; BARANOVSKAYA, G.M.; SEMILETKOVA, I.N.

Grinding of zinc whites in a ball mill in a solvent medium. Lakokras. mat. i ikh prim. no.3:62-63 '61. (MIRA 14:6)

1. Tashkentskiy lakokrasochnyy zavod.
(Pigments)
(Zinc oxide)

BODNYA, M.D.; BARANOVSKAYA, G.M.; OSOVETSKIY, M.A.; OBNOSOVA, A.D.; SALKOVA, M.M.

Replacing hydrolysis alcohol with synthetic alcohol in the production of spirit varnishes for furniture. Lakokras. mat. i ikh prim. no.3:65-66 '61. (MIRA 14:6)
(Varnish and varnishing)

BODNYA, M.D.; BARANOVSKAYA, G.M.; SEMILETKOVA, I.N.

Refining rosin by premelting. Lakokras. mat. i ikh prim. no.5: 80-81 '61. (MIRA 15:3)

1. Tashkentskiy lakokrasochnyy zavod.
(Gums and resins)

BODNYA, M.D.; BARANOVSKAYA, G.M.; OBNOSOVA, A.D.; KABANOVA, L.V.

Use of catalpa oil in the manufacture of alkyd resins and drying oils. Lakokras.mat.i ikh prim. no.5:78 '62. (MIRA 16:1)

1. Tashkentskiy lakokrasochnyy zavod.
(Paint materials) (Catalpa)

ABDUVALIYEV, A.A.; BODNYA, M.D.; BARANOVSKAYA, G.M.; OBNOSOVA, A.D.; ISRAILOV, D.

Continuous method of sylvan polymerization in the solvent medium. Lakokras.mat.i ikh prim. no.6:27-29 '62. (MIRA 16:1)
(Sylvan)

ABDUVALIYEV, A.A.; ISMATOV, N.Kh.; BARANOVSKAYA, G.M.

Copolymerization of silvan and tung oil. Uzb. khim. zhur. 9 no.5:48-52 '65. (MIRA 18:12)

1. NIIKhTTS. Submitted Feb. 20, 1964.

L 23819-66 EWT(a)/EWP(j)/T IJP(c) WW/RM

ACC NR: AP6008691 (A) SOURCE CODE: UR/0291/65/000/005/0048/0052

AUTHOR: Abduvaliyev, A. A.; Ismatov, N. Kh.; Baranovskaya, G. M. 33

ORG: NIIKhTTs B

TITLE: Copolymerization of sylvan and tung oil 15

SOURCE: Uzbekskiy khimicheskiy zhurnal, no. 5, 1965, 48-52

TOPIC TAGS: copolymerization, sylvan, tung oil, ionic catalyst

ABSTRACT: The copolymerization of sylvan and tung oil in the presence of ionic catalysts was carried out at 50°C in an inert gas atmosphere with constant stirring. The catalysts, $ZnCl_2$, $(CH_3)_xSiCl_y$, and sulfuric acid etherate, were found to be completely suitable for obtaining high yields of sylvan-tung oil copolymers. Lacquer films on glass and steel substrates were prepared from the solutions, and the physicomechanical properties of the copolymer films were measured. As the sylvan content of the copolymer increases, the drying rate of the film, its hardness, luster, and water resistance increase. The optimum ratio of sylvan to tung oil was found to range from 80:20 to 50:50. The films adhere well to metal and wood. Infrared spectra indicate that the copolymerization of sylvan and tung oil in the presence of ionic catalysts forms a substance with a higher molecular weight and a lower specific functionality than those of the initial oil. This causes a decrease in the gelation rate of the copolymer as its sylvan content increases. Orig. art. has: 2 figures, 2 tables.

SUB CODE: 07/ SUBM DATE: 20Mar64/ ORIG REF: 002/ OTH REF: 000

Card 1/1 FV

30345

27.1220

S/205/61/001/004/002/032
D298/D303

AUTHORS: Kuzin, A. M., Baranovskaya, I., Strazhevskaya, N. B., and Struchkov, V. A.

TITLE: A study of change in the state of deoxyribonucleic acid in Escherichia coli exposed to gamma-radiation

PERIODICAL: Radiobiologiya, v. 1, no. 4, 1961, 476-478

TEXT: It was found that irradiation of hens in a dose of 2.5 kr led to an immediate change of 50% in the structuro-mechanical properties of the secreted polymolecular deoxyribonucleic acid (DRN) complexes. This points to disturbance of the crude state of DRN in the cell. To check whether this phenomenon has a general significance in radiation biology, the authors studied the state of DRN in E. coli before and after irradiation. The DRN state and the effects of radiation at various stages in the bacterial strain's development were also studied. Tests Tests were run on a young 16-hour and a stationary 46-hour culture of

Card 1/3

30345

S/205/61/001/004/002/032
D298/D303

A study of change...

E. coli var. B, irradiated by gamma-rays from a Co^{60} source in a dose of 4 kr (LD_{31} for the particular strain) at an intensity of 450 r/min. and at 37° and 20°C. The structuro-mechanical properties of the DRN were measured with a capillary elastoviscosimeter at 25°C and the results expressed as values of the relative viscosity η_{rel}. The results showed that DRN in the young E. coli culture was in a special state, characterized by the high structuro-mechanical properties of its solutions (η_{rel} 200 dl/g). The stationary E. coli culture contained DRN in a qualitatively different state, with a η_{rel} value of 100 dl/g. Immediately after irradiation, changes of 50% in the structuro-mechanical properties of the DRN were noted in the young E. coli culture, whereas in the old culture these properties showed no practical change. The authors deduce from this that there is a special state of DRN characteristic of young mitotic cells, and that this is linked directly with their sensitivity to radioactivity. There are 2 tables and 4 references:

Card 2/3

A study of change...

2 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: G. E. Stapleton, J. Bacteriol., 70, 357, 1955; J. M. Webb, H. B. Levy, J. Biol. Chem., 213, 107, 1959.

ASSOCIATION: Institut biologicheskoy fiziki AN SSSR (Institute of Biophysics, AS USSR), Moscow

SUBMITTED: April 26, 1961

Card 3/3

KUZIN, A.M.; BARANOVSKAYA, I.; STRAZHEVSKAYA, N.B.; STRUCHKOV, V.A.

Investigating changes in the state of desoxyribonucleic acid in Escherichia coli during gamma irradiation. Radiobiologiia 1 no.4:476-478 '61. (MIRA 17:2)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

BARANOVSKAYA, I.A.

POLAND / Chemical Technology. Pesticides. H-18

Abs Jour : RZhKhim., No 12, 1958, No 40777

Author : Kulesha, Baranovskaya, Dlugokentskaya
Inst : Not given
Title : Studies on the Removal of Thallium Compounds in the Derotification of Foods

Orig Pub : Roczn. Panstw. zakl., 1957, 8, No 4, 381-389

Abstract : In view of the danger arising in the applicatinn of thallium salts in combating rodents (R), laboratory and field experiments were carried out with cumatox (varpharine) in powder form, aqueous solution and emulsion. A preparation from flour, and 0.5% of I proved to be unsuitable, because of rapid spoilage. Positive results were obtained with talcum, chalk, and 0.5% of I with the addition of a preservative (for instance, p-nitrophenol). Aqueous solution of I turned out to be stable only in strongly alkaline media (pH > 9) which,

Card 1/2

Abs Jour : RZhKhim., No 12, 1958, No 40777

in practice, is difficultly possible. The emulsion of I, obtained by its dilution with alcohol solution in the presence of nonionic emulsifier, was a stable one. The coagulation starts only after 12 days. The death of animals (rats) caused by I was observed after 3-5 days. To combat R on outside premises, the following strongly acting poisons are recommended: Zn_3P_2, α-naphthyl thiourea, extract from squill.

USSR/Zooparasitology. Parasitic Worms. Helminths of Plants. G

Abs Jour: Ref Zhur-Biol., No 17, 1958, 76941.

Author : Daranovskaya, I.A.
Inst :
Title : On the Knowledge of the Genus Paraphelenchus (Micoletzky, 1922) Micoletsky, 1925 (Menatoda. Aphelenchidae).

Orig Pub: Zool. zh., 1958, 37, No 1, 13-19.

Abstract: A description and illustrations of P. tritici sp. n. of the roots of winter wheat of the Moskovskaya oblast are given; a determination table of 4 species of the genus is presented.

Card : 1/1

BAKALOVSKAYA, I. A., Cand Biol Sci -- (diss) "Dynamics of the fauna of nematodes of grass crops and its analysis." Moscow, 1960. 18 pp; 1 page of tables; (Ministry of Agriculture USSR, All-Union Inst of Helminthology im Academician K. I. Skryabin); price not given; (KL, 18-60, 148)

BARANOVSKAYA, I.A.

Dynamic regularities of the nematode fauna of forage grasses and factors influencing them. Trudy Gel'm. lab. 10:32-45 '60.
(MIRA 13:7)
(Grasses—Diseases and pests)
(Nematode diseases of plants)

24(4), 24(1)

SOV/51-6-5-9/34

AUTHORS: Eskin, V.Ye. and Baranovskaya, I.A.

TITLE: Acoustic Double Refraction of Phenyl-Ethyl Alcohol at Low Temperatures (Akusticheskoye dvoynoye lucheprelomleniye fenil-etilovogo spirta pri nizkikh temperaturakh)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 5, pp 616-619 (USSR)

ABSTRACT: The authors measured viscosity and acoustic double refraction of phenyl-ethyl alcohol ($C_6H_5CH_2CH_2OH$). Viscosity was measured between +20 and -37.5°C by the falling sphere method. Viscosity increases in this region of temperatures from 0.115 to 36.8 poises. Acoustic double refraction was measured by a method described earlier by Tsvetkov and Eskin (Refs 3, 5) at ultrasonic frequencies of 18.8 and 38.5 Mc/s at five temperatures: -29.5, -33.0, -34.0, -36.0, -37.5°C. The quantity measured in acoustic double-refraction studies was α, which is the angle of rotation of the analyser in the polarization photometer. The angle α, plotted as a function of voltage V applied to the electrodes of the vibrating quartz plate, is shown in a figure on p 617 for temperatures of -37.5°C and -29.5°C. Benzine was used as the working liquid in which the quartz ultrasonic source and a small cell containing a millimetre thick layer of phenyl-ethyl alcohol were placed. The whole

Card 1/3

Acoustic Double Refraction of Phenyl-Ethyl Alcohol at Low Temperatures

apparatus was thermally insulated and temperature was measured with a pentane thermometer. The acoustic double-refraction coefficient K is given by

$$K = b c \lambda \alpha / \ell \omega^2 \eta m V,$$

where $b = (\sqrt{2}/6.4) \times 10^8$; c is the velocity of sound in phenyl-ethyl alcohol; λ is the wavelength of the light used in double refraction experiments (actually 5500 Å); ℓ is the path of the light beam in the ultrasonic field ($\ell = 1.6$ cm); ω is the frequency of ultrasonic vibrations; η is the viscosity of the liquid; m is the ratio of the acoustic impedances of quartz and benzine ($m = 10$); α is in radians and V is in e.s.u. units. The values of K are given in cols 3 and 4 of Table 1 for 18.8 and 38.5 Mc/s respectively. These values are all of the order of 10^{-11}. The relaxation time of molecular orientation τ in phenyl-ethyl alcohol was calculated from

$$\tau = \frac{1}{\omega}\left(\frac{M^2}{K^2} - 1\right)^{\frac{1}{2}},$$

where M is the dynamic double-refraction coefficient. The values of τ are given in cols 3 and 4 of Table 2 for 18.8 and 38.5 Mc/s respectively.